

AEW-DA550C & AEW-DA660D

UHF Antenna Distribution Systems



Features

- **Active unity-gain, band filtered DA**
- **Dual 1-in 4-out RF sections**
- **RF cascade output**
- **Defeatable 12V DC antenna power**
- **Four receiver power jacks (12V DC, 500 mA ea.)**
- **IEC power input with pass-through connector**
- **Reinforced metal chassis with integral rack ears and rear rack support**
- **Front-mount antenna cables and connectors included**

Description

The AEW-DA550C (540-565 MHz) and AEW-DA660D (655-680 MHz) are UHF active unity-gain antenna distribution systems that enable a single pair of antennas to feed multiple wireless system receivers. Identical in all other respects, the AEW-DA550C operates over a nominal 540-565 MHz range, while the AEW-DA660D operates over a nominal 655-680 MHz range. These units are designed to complement wireless systems operating in the Audio-Technica "C" Band (541.500 - 566.375 MHz) or "D" Band (655.500 - 680.375 MHz), as well as other wireless systems operating in the same frequency ranges.

Each antenna distribution system provides two identical "1-in, 4-out" RF sections consisting of an antenna input, four bandpassed isolated receiver outputs and a bandpassed "cascade" directional coupler to supply signal to additional equipment. All RF connections utilize standard BNC-type connectors.

Both antenna input jacks offer switchable +12V DC output on their center pins to operate Audio-Technica powered antennas, in-line boosters or other powered antenna accessories drawing up to 250 mA total per antenna jack.

Additionally, four jacks providing 12V DC (center positive) are provided on the rear panel of each antenna distribution system to power as many as four wireless receivers operating on 12 volts at up to 500 mA each. The 12-volt supplies for powering receivers and in-line devices are short-circuit protected.

Included with the antenna distribution system are four DC cables appropriate for use with ATW-R3100b (or like powered) receivers along with ten RF jumper cables. The antenna distribution system operates from 100-240V AC 50/60 Hz power and features an IEC-type input connector with pass-through to allow for powering of other devices.

Designed to mount in a single rack space, the unit features steel case construction with steel reinforced front panel and rear rack-mount

supports for extreme durability. An included set of RF bulkhead connectors and cables permits front-panel antenna mounting.

Architect's and Engineer's Specifications

The antenna distribution system shall consist of two independent "one-in by four-out" sections. Each section shall be bandpass filtered to minimize the pickup of undesirable RF signals. Additionally, a dedicated directional coupler output shall be provided to enable additional antenna distribution systems to be cascaded together for increased capacity. All antenna and receiver output connections shall be standard BNC-type, and ten RF jumper cables shall be provided with each antenna distribution system for interconnections. The antenna distribution system shall be capable of supplying 12V DC power on the antenna inputs to allow the use of active antennas or antenna in-line booster accessories. This voltage shall be protected against short-circuits and overloads. The antenna distribution system shall also be capable of supplying individual short circuit protected 12V DC outputs to power up to four associated wireless receivers operating on 12V DC at up to 500 mA each. Four sets of power jumpers (center pin positive) shall be included with the antenna distribution system. A front panel power switch with power-on indicators shall be provided on each unit. The antenna distribution system shall be designed to operate on 110-240V AC 50/60Hz power. Power input connections shall be standard IEC-type and an IEC-type AC power pass through output shall be provided to allow power to be cascaded to additional devices. The unit shall be designed to mount in a standard IEC equipment rack and shall occupy a single rack space. Construction shall be of steel with steel-reinforced front panel and rear rack-mount supports. Provisions shall be provided on the front panel to locate a pair of BNC antenna connections. Included with the unit will be a set of bulkhead BNC RF connectors and cables to facilitate front panel antenna connections.

The Audio-Technica AEW-DA550C [AEW-DA660D] is specified.

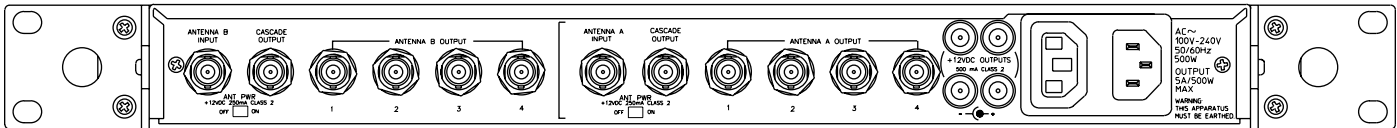
AEW-DA550C & AEW-DA660D

Specifications

Nominal frequency range	AEW-DA550C: 540-565 MHz AEW-DA660D: 655-680 MHz
Nominal amplifier gain	0 dB, ± 3 dB
Nominal cascade gain	-3 dB, ± 3 dB
Input impedance	50 ohms
Output impedance	50 ohms
In-line antenna power	+12V DC on RF input jacks, 250 mA maximum per jack
External receiver power	12V DC, center positive, 500 mA maximum per jack (4 total)
Power input	100-240V AC, 50/60 Hz, auto-adjusting, 500W maximum. (Includes AC pass-through load.)
Dimensions	480.0 mm (19.00") W x 48.8 mm (1.92") H x 280.0 mm (11.00") D
Weight	2.7 kg (5.9 lbs)
Accessories included	320-type 120V power cordset; IEC 320-type AC pass-through cable; 10 BNC-to-BNC 1.5' RF interconnect cables; front-mount antenna cables and connectors; 4 ATW-RDCN DC power interconnect cables; 4 plastic feet with screws

In the interest of standards development, A.T.U.S. offers full details on its test methods to other industry professionals on request.

Specifications are subject to change without notice.



Audio-Technica U.S., Inc., 1221 Commerce Drive, Stow, Ohio 44224
 Audio-Technica Limited, Old Lane, Leeds LS11 8AG England
 ©2010 Audio-Technica U.S., Inc. audio-technica.com

0001-0085-01